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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/799,828 | 03/12/2004 | Bradley M. Hiben | CM06186H | 8521 |
| 22917 | 7590 | 11/03/2005 | EXAMINER | |
| MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196 | | | MATTIS, JASON E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2665 | |

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 10/799,828 | Applicant(s) HIBEN ET AL. | |
| | Examiner Jason E. Mattis | Art Unit 2665 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,7,9,12-15 and 18-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1,2,5,7,9 and 13-15 is/are allowed.
6) ☒ Claim(s) 12 and 18-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the amendment filed on 8/9/05. Claims 3-4, 6, 8, 10-11, and 16-17 have been cancelled by the amendment. New claims 18-21 have been added. The previous rejections of claims 1, 3, 5, and 13 under the second paragraph of 35 U.S.C. 112 have been withdrawn due to the amendment. Claims 1-2, 5, 7, 9, 12-15 and 18-21 are currently pending in the application.

Drawings

1. The drawings are objected to because of the following informalities: The item numbers in Figure 8 are not consistent with the description of the Figure 8 on page 5 of the specification. For example, the description on page 5 describes first packet 804 and bursts 806 and 808; however, these item numbers are not found in Figure 8.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

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consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 depends on claim 11, which has been withdrawn. It is recommended that claim 12 be amended such that it depends on claim 5 instead of claim 11.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (U.S. Pat. 5842045) in view of Bridgelall (U.S. Publication 2002/0085516 A1).

With respect to claim 18, Nakamura discloses a method of receiving a synchronization field that comprises a synchronization pattern (**See column 3 lines 20-31 of Nakamura for reference to receiving a synchronizing pattern of an input signal**). Nakamura also discloses comparing the received synchronization pattern against first and second known synchronization patterns (**See column 3 lines 20-31 of Nakamura for reference to comparing a received synchronization pattern to three different stored synchronization patterns**). Nakamura further discloses selecting a protocol type to communicate with based on which known synchronization pattern the received synchronization pattern is of (**See column 3 line 51 to column 4 line 5 of Nakamura for reference to comparing the received pattern with the three stored patterns and selecting a protocol to communicate with based on which known pattern the received pattern corresponds to**). Nakamura does not specifically disclose that method operates in a wireless communication system with the protocols corresponding to a first and second air interface type and frequency.

With respect to claim 20, Nakamura does not specifically disclose that the first and second air interface types are FDMA and TDMA respectively.

With respect to claims 18 and 20, Bridgelall, in the field of communications, discloses a wireless communication system having devices that operate in accordance with both TDMA and FDMA, which are air interface protocol types with corresponding communication frequencies (**See page 1 paragraph 8 of Bridgelall for reference to dual mode Radios that operate according to both FDMA and TDMA**). Using a wireless communication system having devices that operate in accordance with both TDMA and FDMA has the advantage of allowing communications to take place between devices using multiple air interface protocols without requiring the devices to be hardwired to each other.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Bridgelall, to combine using a wireless communication system having devices that operate in accordance with both TDMA and FDMA, as suggested by Bridgelall, with the method of protocol determination method of Nakamura, with the motivation being to allow communications to take place between devices using multiple air interface protocols without requiring the devices to be hardwired to each other.

With respect to claim 19, Nakamura discloses that the first and second synchronization patterns are uncorrelated (**See column 3 line 51 to column 4 line 5 of Nakamura for reference to comparing the received pattern with the three stored patterns, which must inherently be different, and therefore uncorrelated, such that a decision as to which of the three stored patterns matches the received pattern is made**).

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Bridgelall as applied to claims 18-20 above, and further in view of Pucheu-Marque (U.S. Pub. US 2002/0089948 A1).

With respect to claim 21, the combination of Nakamura and Bridgelall does not disclose using a synchronization pattern defined in ANSI.102.BAAA.

With respect to claim 21, Pucheu-Marque, in the field of communications, discloses communicating using a frame structure as defined by TIA/EIA-102.BAAA (**See page 4 paragraph 43 of Pucheu-Marque for reference to using a frame structure, which includes a synchronization pattern as defined by TIA/EIA-102.BAAA**).

Using a synchronization pattern defined in ANSI.102.BAAA has the advantage of using a pattern that adheres to a known industry wireless communication standard.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Pucheu-Marque, to combine using a synchronization pattern defined in ANSI.102.BAAA, as suggested by Pucheu-Marque, with the method of the combination of Nakamura and Bridgelall, with the motivation being to use a pattern that adheres to a known industry wireless communication standard.

Allowable Subject Matter

7. Claims 1-2, 5, 7, 9, and 13-15 are allowed.

8. Claim 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

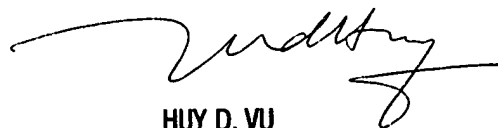
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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